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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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12/16/2003

Herman E. Snyder

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NEKTAR THERAPEUTICS
201 INDUSTRIAL ROAD
SAN CARLOS, CA 94070

EXAMINER

BOECKMANN, JASON J

ART UNIT

PAPER NUMBER

3752

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/738,912	Applicant(s) SNYDER ET AL.	
	Examiner Jason J. Boeckmann	Art Unit 3752	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on 21 July 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-26 is/are pending in the application.
- 4a) Of the above claim(s) 1-16 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 17-26 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 16 December 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>10/22/2004, 2/2/2007</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Election/Restrictions

Applicant's election with traverse of Group II (claims 17-26) in the reply filed on 7/21/2008 is acknowledged. The traversal is on the ground(s) that there is no serious burden in examining all groups. This is not found persuasive because the examiner notes that there is burden in examining groups of claims that are independent and distinct from each other. In this case, the method claims do not require the second channel through which atomizing gas may flow, which is positively recited in the apparatus claims, therefore allowing the method claim to be performed with a materially different apparatus than the one of the apparatus claims. These groups of claims are independent and distinct from each other.

The requirement is still deemed proper and is therefore made FINAL.

Claims 1-16 are withdrawn from further consideration pursuant to 37 CFR 1.142(b), as being drawn to a nonelected invention, there being no allowable generic or linking claim. Applicant timely traversed the restriction (election) requirement in the reply filed on 7/21/2008.

Specification

Claims 18, 19, 23 and 24 are objected to because of the following informalities: The specification is objected to for the use of English units in the specification. In order to minimize the necessity in the future for converting dimensions given in the English system of measurements to the metric system of measurements when using printed

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patents as research and prior art search documents, all patent applicants should use the metric (S.I.) units followed by the equivalent English units when describing their inventions in the specification of patent applications (see MPEP 608.01).

Appropriate correction is required.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 17-26 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Regarding claims 17, 22 and 26, it is not clear what is meant by the terms “liquid may flow” and “gas may flow.” Is the liquid or the gas flowing through the channel or not?

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 17, 20-22 and 25 are rejected under 35 U.S.C. 102(e) as being anticipated by Skeath et al. (6,352,209).

Skeath et al. shows an atomizer for forming droplets, the atomizer comprising: a first channel (64) through which a liquid may flow, the channel comprising a constriction (where the diameter gets smaller toward the end just before it reaches the main gas channel) for spreading the liquid into a thin film (column 5, lines 49-55) in the channel; and a second channel (the main gas channel in the center of the atomizer) through which an atomizing gas may flow, the second channel being positioned so that the atomizing gas impinges the liquid thin film in a manner which produces droplets having a diameter less than 35 micrometers (column 2, lines 5-10). It is also noted that the gas impinges the liquid at a right angle (figure 3).

Regarding claim 20, the device has a third channel (66).

Regarding claims 21 and 25, the first channel is shaped so that the thin film is cylindrically shaped as it leaves the exit to the first channel.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 18, 19, 23 and 24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Skeath et al. (6,352,209).

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Skeath et al. shows all aspects of the applicant's invention as in the rejection of claims 17 and 22 above, but fails to disclose that the constriction has a diameter of less than .005 inches. However, it would have been obvious to one with ordinary skill in the art at the time the invention was made to make the diameter of the constriction less than .005 inches since our reviewing courts have held that where the only difference between the prior art and the claims was a recitation of relative dimensions of the claimed device and a device having the claimed relative dimensions would not perform differently than the prior art device, the claimed device was not patentably distinct from the prior art device. *Gardner v. TEC Systems, Inc.*, 725 F.2d 1338, 220 USPQ 777 (Fed. Cir. 1984), cert. denied, 469 U.S. 830, 225 USPQ 232 (1984).

Additionally, it is well known in the art that the smaller the constriction, the faster the fluid velocity will be going through the restriction, as well as the more turbulent it will be. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the applicant's invention to make the constriction diameter less than .005, in order to increase the velocity and the turbulence of the fluid as it passes through the restriction point.

Claim 26 is rejected under 35 U.S.C. 103(a) as being unpatentable over Gordon et al. (6,077,543), in view of Skeath et al. (6,352,209).

Gordon et al. discloses a process of preparing dispersible dry powders that includes an atomizing operation (10) that produces droplets of a liquid medium which are then dried in a drying operation (20) and then collected in a separation operation

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(30). The drying and collecting being done in a chamber. Gordon et al. does not however disclose the specific details of the atomizer that are recited in claim 26.

However, Skeath et al. shows an atomizer for forming droplets, the atomizer comprising: a first channel (64) through which a liquid may flow, the channel comprising a constriction (where the diameter gets smaller toward the end just before it reaches the main gas channel) for spreading the liquid into a thin film (column 5, lines 49-55) in the channel; and a second channel (the main gas channel in the center of the atomizer) through which an atomizing gas may flow, the second channel being positioned so that the atomizing gas impinges the liquid thin film in a manner which produces droplets having a diameter less than 35 micrometers (column 2, lines 5-10). It is also noted that the gas impinges the liquid at a right angle (figure 3).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the applicant's invention to use the atomizer of Skeath et al. in the atomization operation of Gordon et al., instead of the atomizer of Gordon et al., in order to atomize the liquid into droplets having a diameter of less than 10 micrometers, as taught by Skeath et al. (column 2, lines 5-10).

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Lindlof (3,567,116) and Watanabe et al. (5,845,846) both show atomizers similar to that of the present invention.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jason J. Boeckmann whose telephone number is (571)272-2708. The examiner can normally be reached on 8:00- 5:00, Monday through Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Len Tran can be reached on (571) 272-1184. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/J. J. B./
Examiner, Art Unit 3752
8/13/2008
/Len Tran/

Supervisory Patent Examiner, Art Unit 3752